



Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207
Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

Customer Specification

PART NO. M9708160

Construction

				Diameters (In)			
1) Component 1	16 X 1 PAIR						
a) Conductor	18 (7.0152) AWG BC			0.046			
b) Insulation	0.016" Wall, Nom. PVC			0.078			
(1) Print	ALPHA NUMERIC NUMBERS - WHITE CONDUCTOR ONLY (ONE-1) ALTERNATE INVERTED 2"SPACING(CTR. TO CTR.)						
(2) Color Code	Alpha Wire Color Code BW						
Pair	Color	Pair	Color	Pair	Color		
1	BLACK-WHITE#1	7	BLACK-WHITE#7	13	BLACK-WHITE#13		
2	BLACK-WHITE#2	8	BLACK-WHITE#8	14	BLACK-WHITE#14		
3	BLACK-WHITE#3	9	BLACK-WHITE#9	15	BLACK-WHITE#15		
4	BLACK-WHITE#4	10	BLACK-WHITE#10	16	BLACK-WHITE#16		
5	BLACK-WHITE#5	11	BLACK-WHITE#11				
6	BLACK-WHITE#6	12	BLACK-WHITE#12				
c) Pair	2/Cond Cabled Together						
(1) Twists:	5.3 Twists/foot (min)						
2) Component 2	1 X 1 COND						
a) Conductor	22 (7/30) AWG BC			0.030			
b) Insulation	0.016" Wall, Nom. PVC			0.062			
(1) Color(s)							
Cond	Color	Cond	Color	Cond	Color		
1	ORANGE						
3) Cable Assembly	17 Components Cabled						
a) Twists:	1.3 Twists/foot (min)						
b) Core Wrap	Clear Mylar Tape, 25% Overlap, Min.						
4) Shield:	Alum/Mylar Tape, 25% Overlap, Min.						
a) Foil Direction	Foil Facing In						
b) Drain Wire	20 (7/28) AWG TC						
5) Jacket	0.063" Wall, Nom.,PVC			0.735 (0.764 Max.)			
a) Color(s)	BLACK						
b) Ripcord	1 End 810 Denier Nylon						
c) Print	ALPHA WIRE-* P/N M9708160 16PR 18 AWG 1C 22 AWG SHIELDED EXXXXX (UL) TYPE PLTC/ITC 105C SUN RES OR CL3 105C OR C(UL) CMG 105C FT4 CE ROHS * = Factory Code [Note: Product may have c(UL) or CSA markings depending upon plant of manufacture.]						

Applicable Specifications

1) UL	CL3	105°C
	PLTC	105°C
	ITC	105°C
	SUN RES	
2) CSA International	C(UL) TYPE CMG	105°C
	FT4	
3) CE:	EU Low Voltage Directive 2006/95/EC	

Environmental

1) CE: EU Directive 2011/65/EU(RoHS2):	This product complies with European Directive 2011/65/EU (RoHS Directive) of the European Parliament and of the Council of 8 June 2011. No Exemptions are required for RoHS Compliance on this item. Consult Alpha Wire's web site for RoHS C of C.
2) REACH Regulation (EC 1907/2006):	This product does not contain Substances of Very High Concern (SVHC) listed on the European Union's REACH candidate list in excess of 0.1% mass of the item. For up-to-date information, please see Alpha's REACH SVHC Declaration.
3) California Proposition 65:	The outer surface materials used in the manufacture of this part meet the requirements of California Proposition 65.

Properties

Physical & Mechanical Properties	
1) Temperature Range	-20 to 105°C
2) Bend Radius	10X Cable Diameter
3) Pull Tension	421 Lbs, Maximum
4) Sunlight Resistance	Yes
Electrical Properties	(For Engineering purposes only)
1) Voltage Rating	300 V _{RMS}
2) Component 1	
a) Mutual Capacitance	34 pf/ft @1 kHz, Nominal
b) Ground Capacitance	61 pf/ft @1 kHz, Nominal
c) Characteristic Impedance	66 Ω
d) Inductance	0.18 μH/ft, Nominal
e) Conductor DCR	6.7 Ω/1000ft @20°C, Nominal
f) OA Shield DCR	6.4 Ω/1000ft @20°C, Nominal
3) Component 2	
a) Ground Capacitance	105 pf/ft @1 kHz, Nominal
b) Inductance	0.06 μH/ft, Nominal
c) Conductor DCR	15.4 Ω/1000ft @20°C, Nominal
d) OA Shield DCR	6.4 Ω/1000ft @20°C, Nominal

Other

Packaging	Flange x Traverse x Barrel (inches)
a) 1000 FT	36 x 14 x 12 Continuous length
b) 500 FT	30 x 14 x 12 Continuous length
c) 100 FT	16 x 11 x 8 Continuous length
d) Bulk(Made-to-order)	
	<i>[Spool dimensions may vary slightly]</i>

www.alphawire.com

Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207

Tel: 1-800-52 ALPHA (25742)

Although Alpha Wire ("Alpha") makes every reasonable effort to ensure their accuracy at the time of publication, information and specifications described herein are subject to errors or omissions and to changes without notice, and the listing of such information and specifications does not ensure product availability.

Alpha provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Alpha be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary) whatsoever, even if Alpha had been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.



Alpha Wire | 711 Lidgerwood Avenue, Elizabeth, NJ 07207
Tel: 1-800-52 ALPHA (25742), Web: www.alphawire.com

EU/China ROHS CERTIFICATE OF COMPLIANCE

To Whom It May Concern:

Alpha Wire Part Number: M9708160

M9708160, RoHS-Compliant Commencing With 1/1/2006 Production

This document certifies that the Alpha part number cited above is manufactured in accordance with Directive 2011/65/EU of the European Parliament, better known as the RoHS Directive, with regards to restrictions of the use of certain hazardous substances used in the manufacture of electrical and electronic equipment. The reader is referred to this Directive for the specific definitions and extents of this Directive. **No Exemptions are required for RoHS Compliance on this item.** It should be noted that this product does not fall within the scope of Directive 2011/65/EU, but this Certificate is offered for cases where this product will be used within EEE that does fit within the Directive's scope. Additionally, Alpha certifies that the listed part number is in compliance with China RoHS "Marking for Control of Pollution by Electronic Information Products" standard SJ/T 11364-2006.

Substance

	Maximum Control Value
Lead	0.1% by weight (1000 ppm)
Mercury	0.1% by weight (1000 ppm)
Cadmium	0.01% by weight (100 ppm)
Hexavalent Chromium	0.1% by weight (1000 ppm)
Polybrominated Biphenyls (PBB)	0.1% by weight (1000 ppm)
Polybrominated Diphenyl Ethers (PBDE), Including Deca-BDE	0.1% by weight (1000 ppm)

The information provided in this document and disclosure is correct to the best of Alpha Wire's knowledge, information and belief at the date of its release. The information provided is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it will become part of. The intent of this document is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.

Authorized Signatory for the Alpha Wire Company:

A handwritten signature in black ink, appearing to read "Dave Watson".

Dave Watson, Director of Engineering & QA

3/5/2013